



Daniel F. Caruso
Chairman

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

September 26, 2007

TO: Parties and Intervenors

FROM: S. Derek Phelps, Executive Director

RE: **DOCKET NO. 336** - Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 811 Blue Hills Avenue, Bloomfield, Connecticut.

As stated at the hearing in Bloomfield on July 24, 2007, after the Council issues its draft findings of fact, parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record; however, no new information, evidence, argument, or reply briefs will be considered by the Council.

Parties and Intervenors may file written comments with the Connecticut Siting Council on the Draft Findings of Fact issued on this docket by October 11, 2007.

SDP/DM/laf

Enclosure

Date: May 23, 2007

Docket No. 336

Page 1 of 1

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200 (860) 275-8299 fax kbaldwin@rc.com Sandy Carter, Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, CT 06108 (860) 803-8219 alexandria.carter@verizonwireless.com
Party (granted 05/22/07)	Buckley Broadcast – WDRC	Scott Baron Chief Engineer WDRC AM 869 Blue Hills Avenue Bloomfield, CT 06002 (860) 243-1115 (860) 286-8257 fax scottbaron@wdrc.com

DOCKET NO. 336 - Cellco Partnership d/b/a Verizon Wireless }
application for a Certificate of Environmental Compatibility and }
Public Need for the construction, maintenance and operation of a }
telecommunications facility located at 811 Blue Hills Avenue, }
Bloomfield, Connecticut. }

Connecticut

Siting

Council

September 18, 2007

DRAFT

Findings of Fact

Introduction

1. Pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes (CGS), as amended, and Section 16-50j-1 et seq. seq. of the Regulations of Connecticut State Agencies (RCSA), Cellco Partnership d/b/a Verizon Wireless (Cellco) applied to the Connecticut Siting Council (Council) on April 25, 2007 for the construction, operation, and maintenance of a telecommunications facility to be located at 811 Blue Hills Avenue in the Town of Bloomfield, Connecticut. (Cellco 1, p. 1)
2. Cellco is a Delaware Partnership with an administrative office located at 99 East River Drive, East Hartford, Connecticut. Cellco is licensed by the Federal Communications Commission (FCC) to operate a wireless telecommunications system in Connecticut. The operation of wireless telecommunications systems and related activities are Cellco's sole business in Connecticut. (Cellco 1, p. 4)
3. The parties in this proceeding are the applicant and Buckley Broadcast-WDRC. (Transcript, July 24, 2007, 3:00 p.m. [Tr. 1], p. 5)
4. The proposed facility would provide PCS coverage and capacity relief along Routes 187 and 218 in Bloomfield and cellular coverage and capacity relief in the southeasterly portion of Bloomfield and the northeasterly portion of the City of Hartford. (Cellco 1, p. i and pp. 1-2)
5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on July 24, 2007, beginning at 3:05 p.m. and continuing at 7:04 p.m. in Bloomfield, Connecticut. (Tr. 1, p. 2 ff.)
6. The Council and its staff conducted an inspection of the proposed site on July 24, 2007, beginning at 2:00 p.m. The applicant flew a balloon from 7:45 a.m. until 5:00 p.m. at the proposed site to simulate the height of the proposed tower. Weather conditions for the balloon flight were favorable in the morning. In the afternoon, light winds moved the balloon around. (Tr. 1, p. 15)
7. Pursuant to CGS § 16-50l(b), notice of Cellco's intent to submit this application was published on April 23 and 24, 2007 in The Hartford Courant. (Cellco 1, p. 5)

8. In accordance with CGS § 16-50(b), Cellco sent notices of its intent to file an application with the Council to each person appearing of record as owner of property abutting the property on which the site is located. (Cellco 1, p. 5; Attachment 4)
9. Cellco did not receive return receipts from two of the adjacent property owners to whom notices were sent. The two owners from whom receipts were not received were Phillip Colley and the Blue Hills Fire Department. Notices were resent to these owners via regular mail. (Cellco 5, Response 7)
10. Pursuant to CGS § 16-50/ (b), Cellco provided notice to all federal, state and local officials and agencies listed therein. (Cellco 1, p. 5; Attachment 2)
11. Cellco posted a sign advising the general public of its pending application at the driveway entrance to the property on which the proposed facility would be located on July 9, 2007. The sign was four feet by eight feet. (Tr. 1, p. 15)

State Agency Comment

12. Pursuant to CGS § 16-50/, the Council solicited comments on Cellco's application from the following state departments and agencies: Department of Environmental Protection, Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, and the Department of Transportation. The Council's letters requesting comments were sent on July 7 and 25, 2007. (CSC Hearing Package dated July 7, 2007; CSC Letter to State Department Heads dated July 25, 2007)
13. The Connecticut Department of Public Health (DPH) responded to the Council's solicitations for comments with no comment. (Memorandum from DPH dated May 11, 2007)
14. The Connecticut Department of Transportation (ConnDOT) responded to the Council's solicitation with no comments. (ConnDOT Letter dated July 20, 2007)
15. No comments were received from any other state agency. (Record)

Municipal Consultation

16. On February 21, 2007, Cellco representatives met with Thomas Hooper, Bloomfield Director of Planning and Zoning, who was representing Bloomfield's Town Manager, Louie Chapman, to begin the sixty day municipal consultation process. (Cellco 1, p. 18)
17. At this meeting, Cellco gave Mr. Hooper copies of technical information summarizing Cellco's proposed telecommunications facility. (Cellco 1, p. 18)
18. Mr. Hooper suggested that Cellco contact the Blue Hills Fire Department to determine if it might have any interest in locating on the tower. As of the date of its application to the Council, Cellco had not received any indication of interest from the Fire Department. (Cellco 1, p. 18)

19. Cellco would provide space for Town of Bloomfield antennas and ground equipment at no charge if requested by the Town. (Cellco 5, Response 22)

Public Need for Service

20. Cellco's existing network currently experiences significant gaps in coverage along Route 187 and Route 218 and along local roads in the southeasterly portion of Bloomfield, particularly at PCS frequencies. (Cellco 1, p. 7)
21. In its Report and Order issued May 4, 1981 in FCC Docket No. 79-318, the FCC recognized the public need for technical improvement, wide-area coverage, high quality service and a degree of competition in mobile telephone service. (Cellco 1, p. 5)
22. The federal Telecommunications Act of 1996 (Act) recognized a nationwide public need for high-quality wireless telecommunication services. The Act also promoted competition among wireless service providers, tried to foster lower prices for consumers, and encouraged the rapid deployment of new telecommunications technologies. (Cellco 1, p. 6)
23. Cellco's proposed Bloomfield Blue Hills Facility would be part of its expanding wireless telecommunications network envisioned by the Act. (Cellco 1, p. 6)
24. In issuing cellular licenses, the federal government has preempted the determination of public need for cellular service by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. (Council Administrative Notice Item No. 7)
25. The Telecommunications Act of 1996 prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7 - Telecommunications Act of 1996)
26. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice Item No. 7)
27. Cellco's antennas would comply with E911 requirements. (Cellco 5, Response 2)

Site Selection

28. Cellco issued a search ring in the Bloomfield Blue Hills area in February 2002. Because the proposed site provides capacity relief as well as coverage to the target area, the search ring was fairly small — it had a radius of one-third mile and was centered on Mt. Sinai Hospital. (Cellco 5, Response 15)

29. Cellco has antennas mounted on five existing facilities located within four miles of its proposed site. These facilities, however, cannot provide coverage or capacity relief within the area Cellco seeks to cover from the proposed site. The existing facilities are listed below:

Facility Owner	Facility Type	Location	Cellco's Antenna Ht.
Crown Atlantic	Monopole – 140'	439-455 Homestead Ave, Hartford	138'
University of Hartford	Rooftop	200 Bloomfield Ave, Hartford	57.5'
Town of Bloomfield	Monopole – 140'	785 Park Ave, Bloomfield	109'
SpectraSite	Monopole – 150'	305 West Service Rd, Hartford	115'
Crown Atlantic	Monopole – 100'	599 Matianuck Ave, Windsor	100'

(Cellco 1, Attachment 8)

30. Cellco investigated four possible sites on which it might locate its proposed facility. These four sites and the determination of their suitability are listed below.

Address	Suitability
811 Blue Hills Avenue, Bloomfield	Site of proposed facility
St. Francis Hospital – 500 Blue Hills Ave Hartford	Hospital ownership did not want to lease space to Cellco
Oak Hill School – 120 Holcomb Avenue Hartford	Site could not provide adequate coverage and capacity relief in target area
Blue Hills Fire Department – 1021 Blue Hills Avenue, Bloomfield	This property is located .65 miles north of proposed site; 125-foot tower on property; rejected because no space available on tower and no room on ground for Cellco's equipment

(Cellco 1, Attachment 8)

31. Cellco notified the legal counsels for T-Mobile, AT&T Wireless, and Sprint Nextel regarding its proposed facility. No other carrier has expressed an interest in this facility. (Cellco 5, Response 16)
32. Cellco maintains that there are no viable and available alternative technologies to provide the coverage and service that its proposed facility would provide. (Cellco 1, p. 9)

Site Description

33. Cellco's proposed site would be on an 8.8-acre parcel located at 811 Blue Hills Avenue in Bloomfield. The property is owned by Samo Realty LLC and is currently being used for industrial/manufacturing purposes. (Cellco 1, p. 2; Attachment 1)

34. The property on which Cellco's facility would be located is in an Industrial-2 (Restricted Industry) zone. Wireless communications towers are allowed in the I-2 zone with a special permit. (Cellco 1, p. 2; Town of Bloomfield Zoning Regulations – bulk filed)
35. Cellco originally planned to erect a 110-foot high steel monopole designed as a flagpole. (Cellco 1, p. 2)
36. To minimize any potential interference problems with WDRC's AM radio signal patterns, Cellco would install a "de-tuning" skirt on its tower. This skirt would consist of three small (No. 6) wires that would be placed 120 degrees apart and would run the height of the tower. Because of the need for these de-tuning wires, Cellco could not fly a flag on its tower as it originally planned. (Tr. 1, pp. 13-14; Cellco 6)
37. Cellco's tower would be erected within a 23-foot by 75-foot leased area. Cellco would house its ground equipment within a 12-foot by 30-foot equipment shelter. (Cellco 1, p. 2)
38. The tower would be located at 41° 38' 34.86"N latitude and 72° 41' 47.75"W longitude. Its elevation at ground level would be approximately 164 feet above mean sea level. (Cellco 1, Attachment 1)
39. Cellco's tower would be designed in accordance with the specifications of the Electronic Industries Association Standard EIA/TIA-222-F-96 "Structural Standards for Steel Antenna Towers and Antenna Support Structures." (Cellco 5, Response 13)
40. The tower would be designed to accommodate three antenna placements. The top two placements would be reserved for Cellco. (Tr. 1, p. 11)
41. Cellco chose to design a tower with internally-mounted antennas based on its negotiations with a previous owner of the host property. (Tr. 1, p. 37 ff.)
42. From an RF perspective, it would be more advantageous to Cellco to erect a monopole on which platforms or externally-mounted antennas could be installed. (Tr. 1, p. 38)
43. Cellco would install six internally-mounted antennas on the proposed tower—three PCS antennas at the 105-foot level and three cellular antennas at the 95-foot level. (Cellco 1, p. 2)
44. Cellco's equipment compound would be enclosed by an eight-foot high chain link fence topped with barbed wire. (Cellco 1, Attachment 1, Drawing SC-3)
45. Cellco would be willing to install a landscape screen along the north, south, and east sides of the proposed equipment compound. (Cellco 5, Response 18)
46. The total amount of fill that would be required for this site is estimated to be less than one cubic yard. No cut would be required. (Cellco 5, Response 12)
47. Cellco does not anticipate that blasting would be required to develop this facility. (Cellco 5, Response 17)

48. Cellco's back up power would be supplied by a diesel generator. (Cellco 1, p. 2)
49. The generator would have a double-walled fuel tank with a leak detection system. The generator's operating and leak detection systems would be continually monitored by Cellco's cell site technicians. The concrete floor beneath the generator would be recessed and capable of containing 120% of the capacity of all generator fluids (fuel and oil). Generator refueling operations would occur inside the generator room. Cellco has a contract with an environmental services company to respond to any spills associated with the generator. (Cellco 1, p. 16)
50. The proposed tower's setback radius would encroach on two neighboring properties to the northwest. The setback radius would extend approximately seven and one half feet onto property owned by Allinson Products at 11 Britton Drive and approximately 6 feet onto property owned by Hermell Products, Inc. at 9 Britton Drive. (Cellco 1, Attachment 1, Drawing SC-1; Tr. 1, p. 20)
51. Cellco could design the tower with a yield point to avoid having the setback radius encroach on any adjoining properties. (Tr. 1, pp. 20-21)
52. Vehicular access to the proposed site would extend from the end of Edgewood Avenue over a new gravel drive of approximately 180 feet. (Cellco 1, p. 2)
53. Utility service for the site would extend from an existing CL&P pole adjacent to Edgewood Avenue and be installed underground following Edgewood Avenue and the new gravel access drive. (Cellco 1, Attachment 1, Drawing SC-1)
54. Land use in the vicinity of the proposed site is characterized by industrial uses to the north and west where the Bloomfield Industrial Park is located, residential uses to the south, and commercial uses to the east along Blue Hills Avenue. (Cellco 1, Attachment 1, p. 4)
55. The closest residence to the proposed facility is located approximately 170 feet to the southeast at 5 Edgewood Avenue. It is owned by Lucien and Rosaline Altenor. (Cellco 1, p. 13; Cellco 5, Response 19)
56. There are approximately 123 homes located within 1,000 feet of the proposed facility. (Cellco 5, Response 20)
57. The estimated cost of the facility, including antennas and radio equipment, is:

Cell site radio equipment	\$450,000
Tower, coax, and antennas costs	110,000
Power systems costs	20,000
Equipment building costs	60,000
<u>Miscellaneous costs</u>	<u>15,000</u>
Total	\$655,000

(Cellco 1, p. 20)

Environmental Considerations

58. Cellco's proposed facility would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (Letter from Deputy State Historic Preservation Officer dated April 19, 2007)
59. The proposed facility is not located in an area that would impact any known occurrence of listed species or significant natural community. (Cellco 1, Attachment 10: Letter from EBI Consulting dated April 5, 2007)
60. There are no federally-listed or proposed; threatened or endangered species or critical habitats known to occur near the proposed facility. (Cellco 1, Attachment 10: Letter from Fish and Wildlife Service dated March 15, 2007)
61. No trees with a diameter of six inches or greater at breast height would be removed to develop this site. (Cellco 5, Response 11)
62. There are no wetlands or watercourses within 200 feet of the proposed site. The closest wetland or watercourse is an unnamed intermittent watercourse located approximately 2,000 feet to the west of the facility. (Cellco 1, p. 17; Attachment 1, p. 4)
63. The Federal Aviation Administration is not required to be notified of the proposed facility. (Cellco 1, p. 19; Attachment 12)
64. According to calculations performed by Cellco, the maximum power density from the radio frequency emissions of Cellco's proposed antennas would be 17.05% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. This calculation was based on a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (Cellco 1, p. 14)

Visibility

65. The proposed tower would be visible year-round from approximately 33 acres within a two-mile radius. (Cellco 1, Attachment 9, p. 4)
66. Approximately 16 residences would have partial year-round views of the proposed tower. (Cellco 1, Attachment 9, p. 4)
67. The tower would be seasonally visible from an additional 44 acres within a two-mile radius. (Cellco 1, Attachment 9, p. 5)
68. Approximately 30 residences would have seasonal views of the tower. (Cellco 1, Attachment 9, p. 5)

69. The visibility of the proposed site from different vantage points in the surrounding vicinity is summarized in the following table. The locations of the vantage points listed are identified by their corresponding number in the Visual Resource Evaluation Report contained in Attachment 9 of Cellco's application and Figure 8 of this document.

<u>Location</u>	<u>Site Visible</u>	<u>Approx. Portion of (110') Tower Visible (ft.)</u>	<u>Approx. Distance and Direction to Tower</u>
1 – Edgewood Avenue, adjacent to site	Yes	Entire tower	200 feet; NW
2 – Merriam Avenue, east of Blue Hills Ave	Yes	Upper 80'	400 feet; NW
3 – Britton Drive, east of Douglas Street	Yes	Upper 20'	840 feet; SE
4 – Britton Drive	Yes	Upper 40'	740 feet; S
5 – Blue Hills Avenue, north of Britton St	Yes	Upper 30'	900 feet; SW
6 – #3 Hubbard Street	Yes	Upper 80'	400 feet; NE
7 – Elizabeth Ave, east of Blue Hills Ave	Yes	Upper 30'	630 feet; SW

(Cellco 1, Attachment 9 – Photographic Simulations)

Existing and Proposed Wireless Coverage

70. In the Bloomfield area, Cellco is licensed to operate in the cellular band at 869-880 MHz and 890-891.5 MHz and in the PCS F Block at 1970-1975 MHz frequency bands. Cellco would install both PCS and cellular antennas operating within these frequency ranges on its proposed tower. PCS antennas would be located at the 105-foot level. Cellular antennas would be located at the 95-foot level. (Cellco 5, Response 1)
71. The heights at which Cellco is proposed to locate its antennas would be the lowest heights at which Cellco could achieve its coverage objectives from the proposed site. (Cellco 5, Response 6)
72. Cellco designs its wireless network for a signal strength of -85 dBm for in-vehicle coverage. (Cellco 5, Response 8; Tr. 1, p. 18)
73. Cellco's design signal strength for in-building coverage is -75 dBm. (Tr. 1, p. 18)
74. At PCS frequencies, Cellco's existing signal strength within the area that would be covered from the proposed site is below its -85 dBm design strength. At cellular frequencies, Cellco's existing signal strength in much of the area that would be covered is -85 dBm or better. (Cellco 5, Response 9)
75. Cellco's PCS antennas would cover 2.1 miles on Route 187 from the proposed site. Its cellular antennas would cover 2.4 miles. On Route 218, Cellco's PCS antennas would cover 1.6 miles, and its cellular antennas would cover 1.7 miles. (Cellco 5, Responses 24 and 25)
76. The proposed facility would cover a 7.3 square mile area at PCS frequencies and a 10.3 square mile area at cellular frequencies. (Cellco 1, pp. 2-3)

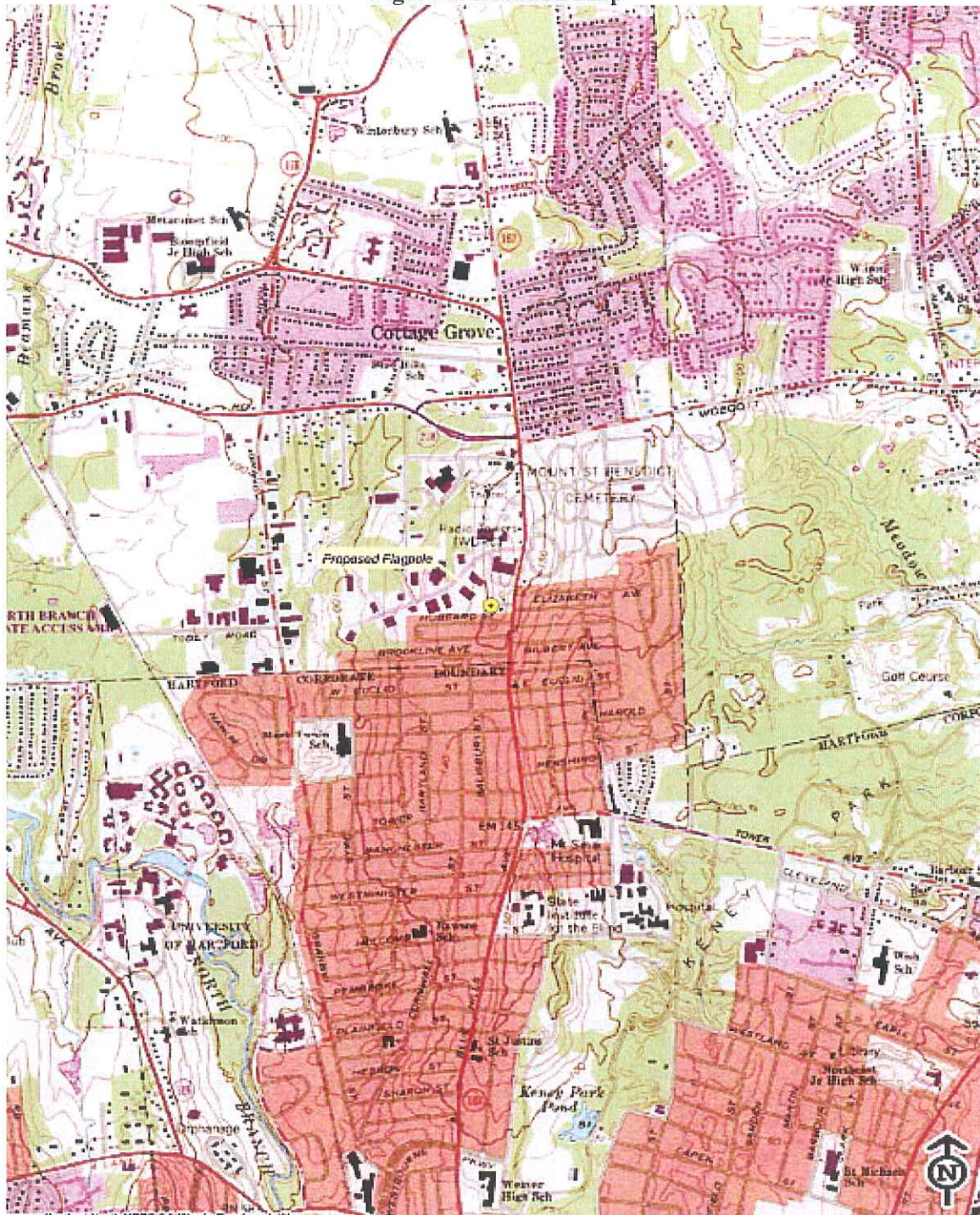
77. Cellco's antennas at the proposed site would hand off signals with the adjacent Cellco sites identified below:

Site Address	Type of Facility	Site Owner	Distance from Proposed Site
439-455 Homestead Avenue, Hartford	140-foot monopole	Crown Atlantic	1.85 miles
200 Bloomfield Avenue, Hartford	Roof-top installation	University of Hartford	1.4 miles
785 Park Avenue, Hartford	140-foot monopole	Town of Bloomfield	2.3 miles
305 West Service Road, Hartford	150-foot monopole	SpectraSite	2.25 miles
599 Matianuck Avenue, Windsor	100-foot monopole	Crown Atlantic	1.3 miles

(Cellco 5, Response 3)

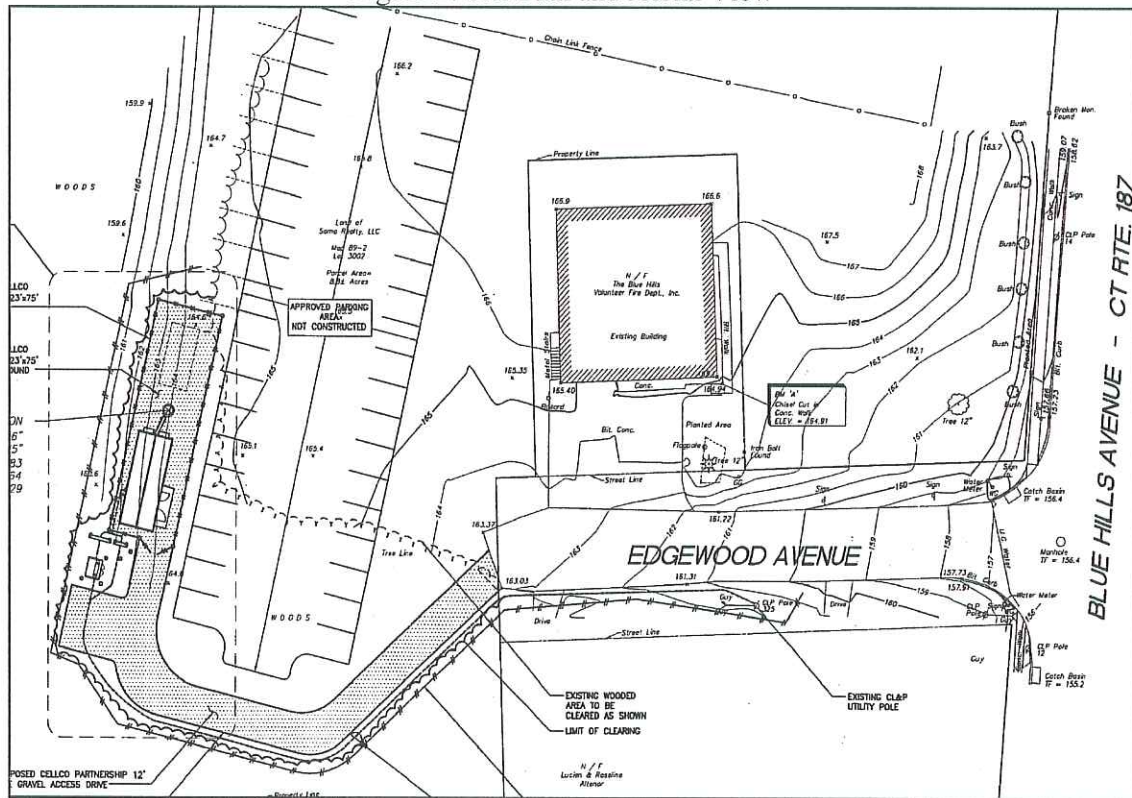
78. Cellco's facility at the proposed location would provide capacity relief for its adjacent facilities at the University of Hartford, in Bloomfield, and in Windsor. (Tr. 1, p. 17 ff.)

Figure 1: Location Map



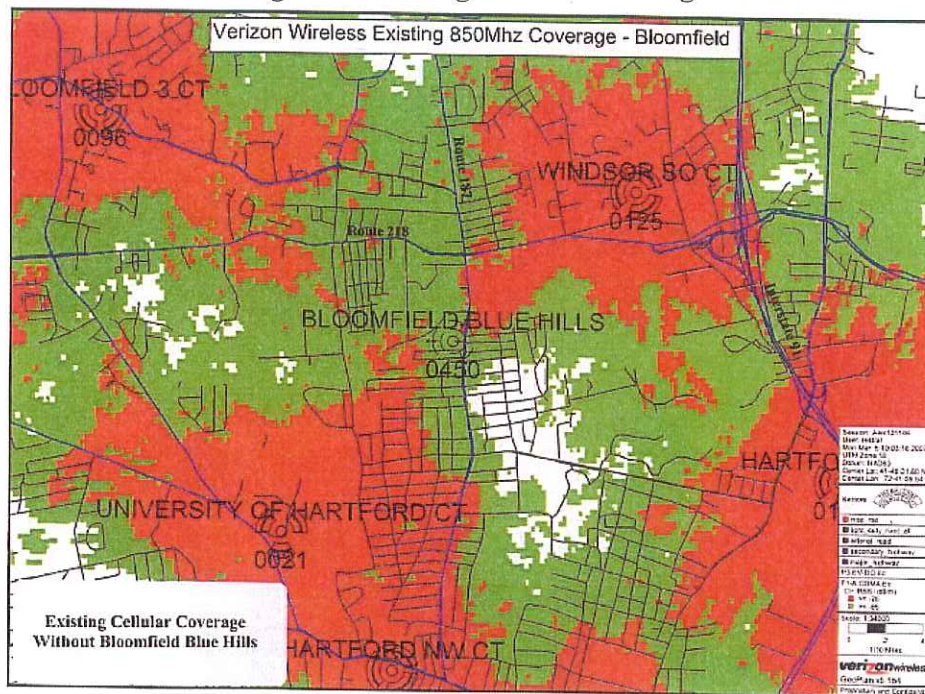
(Cellco I, Attachment I)

Figure 2: Site Plan and Aerial View



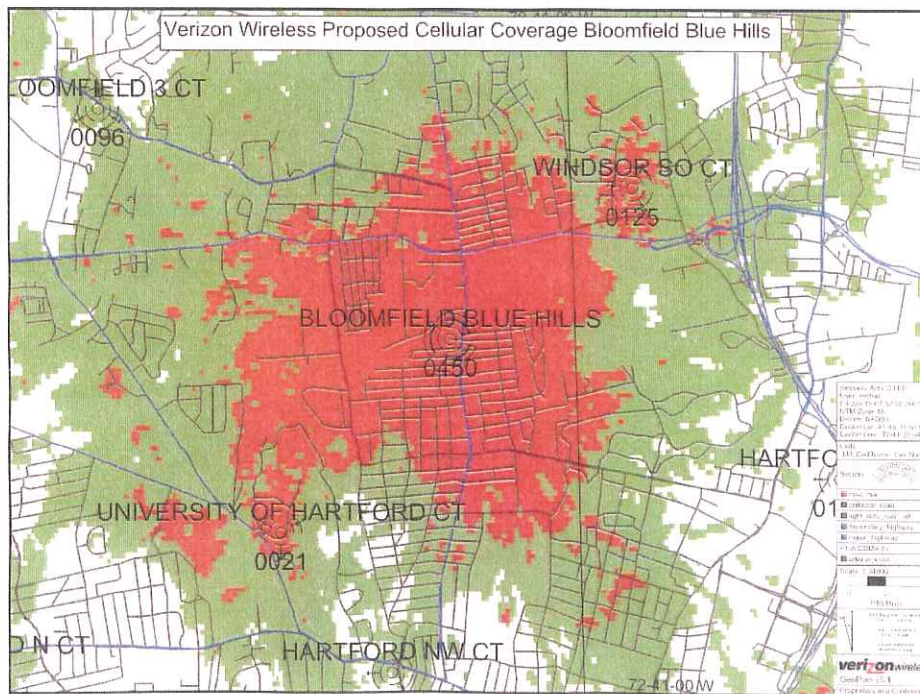
(Cellco 1, p. iii and Attachment 1)

Figure 3: Existing Cellular Coverage



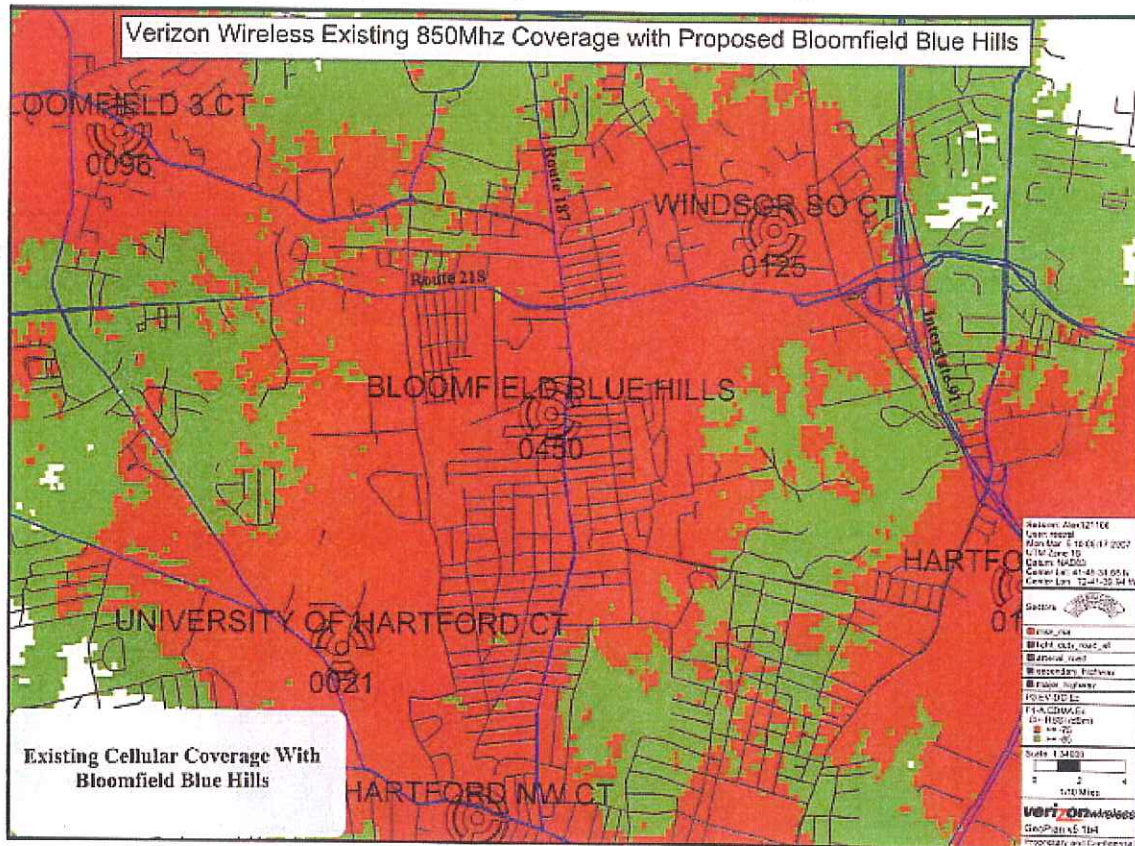
(Cellco 1, Attachment 6)

Figure 4: Cellular Coverage From Proposed Site



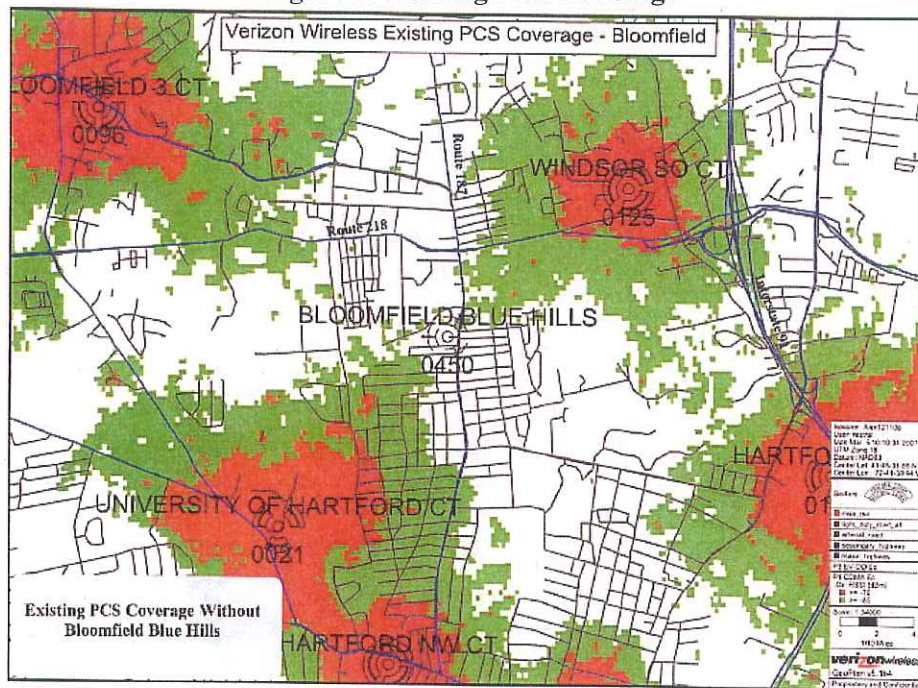
(Cellco 5, Attachment 1)

Figure 5: Composite Cellular Coverage



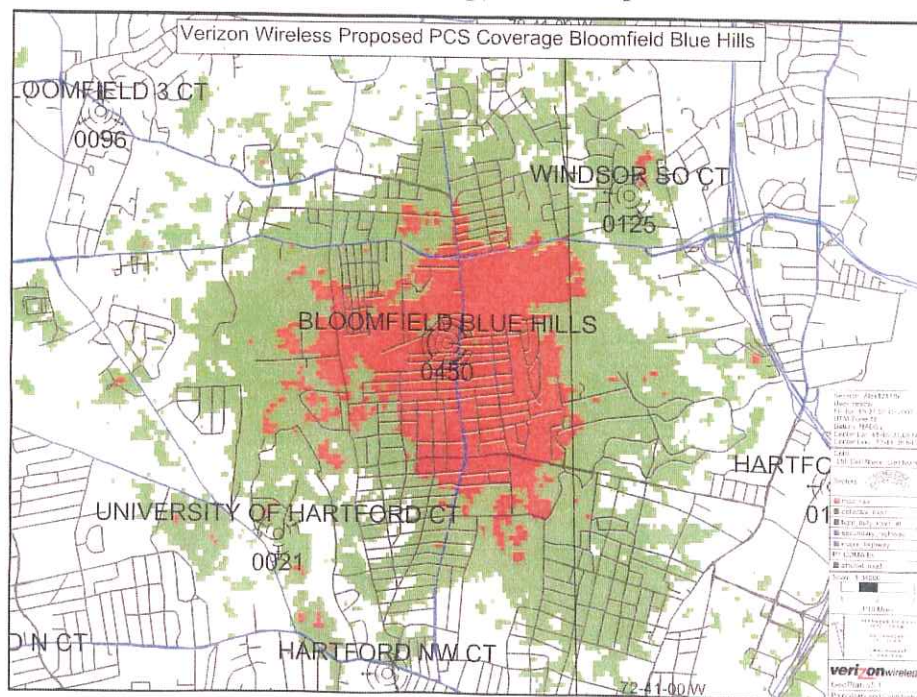
(Cellco 1, Attachment 6)

Figure 6: Existing PCS Coverage



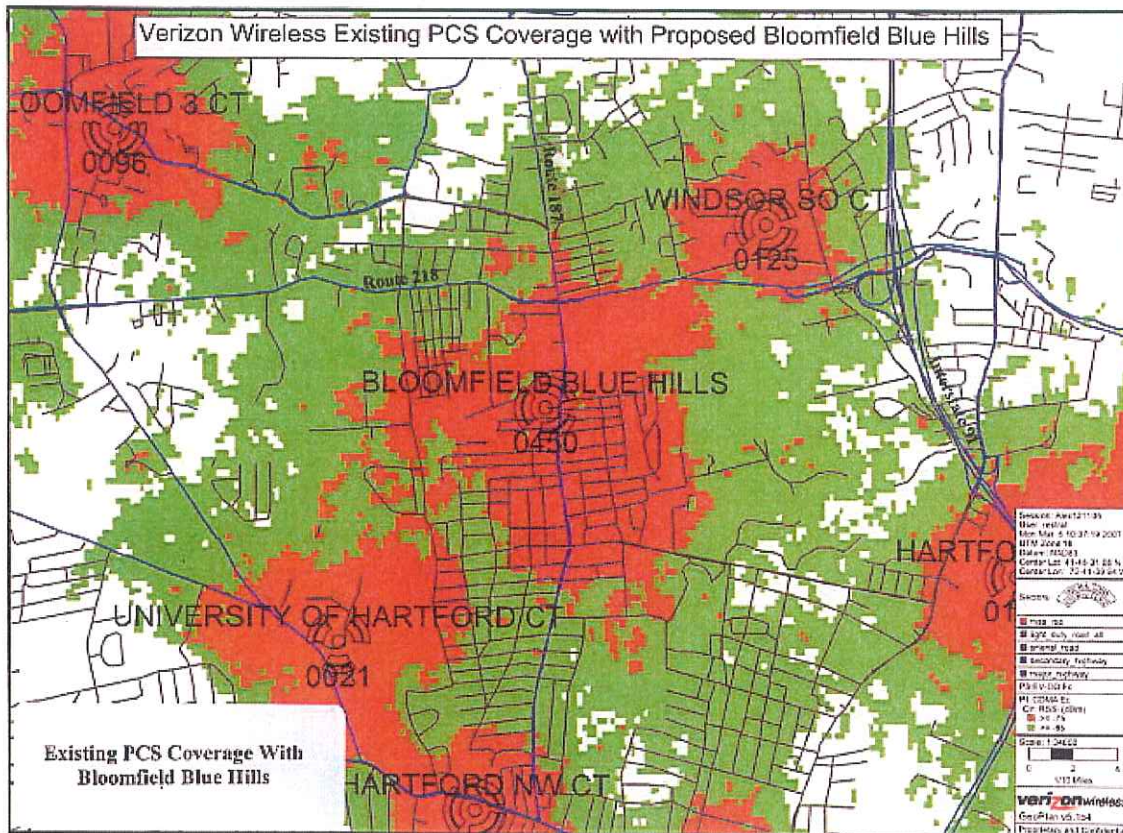
(Cellco 1, Attachment 6)

Figure 7: PCS Coverage From Proposed Site



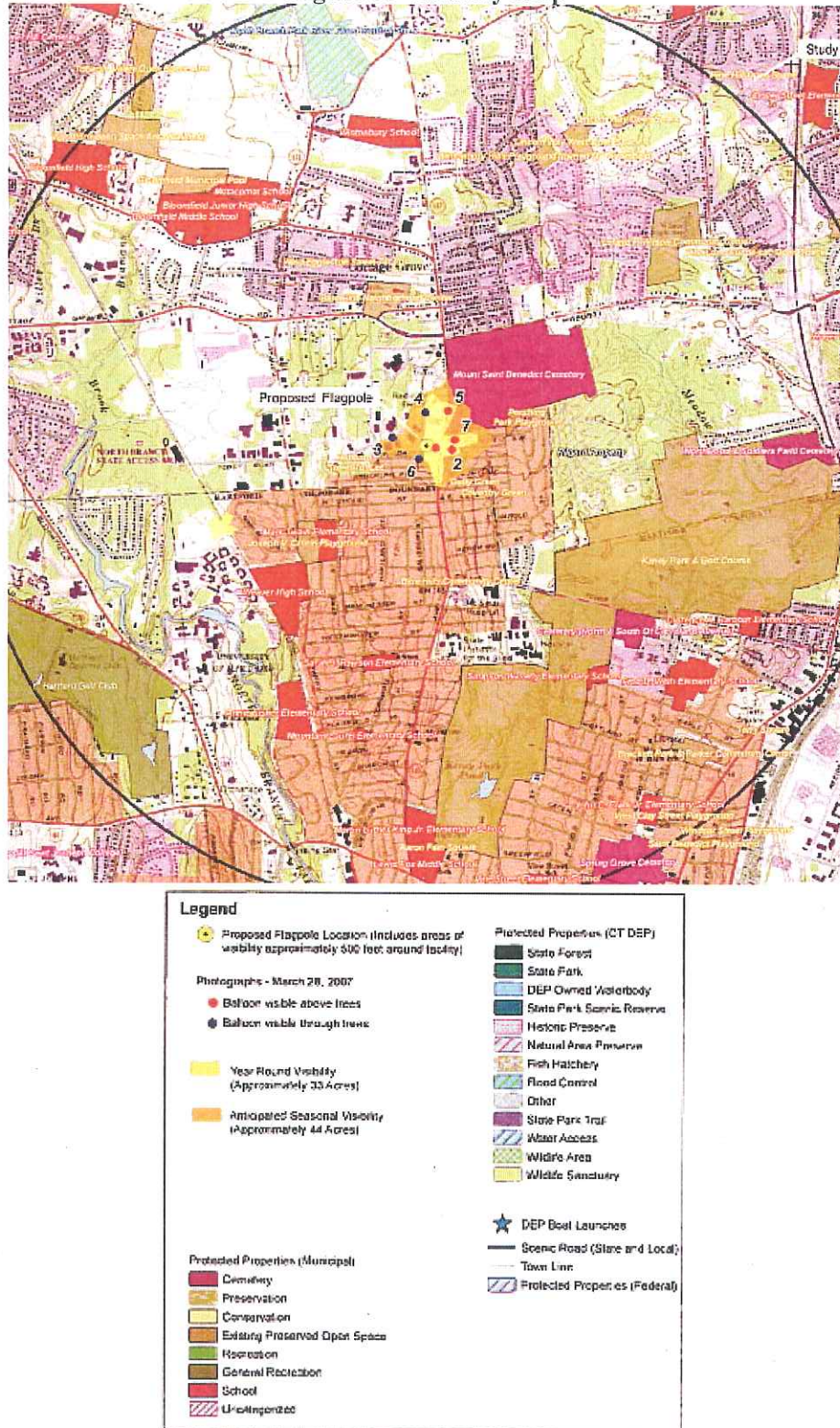
(Cellco 5, Attachment 5)

Figure 8: Composite PCS Coverage



(Cellco 1, Attachment 6)

Figure 9: Visibility Map



(Cellco 1, Attachment 9)